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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/001,741      | 11/15/2001  | Thomas W. Smith      | D/A1505Q1           | 2654             |

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Patent Documentation Center  
Xerox Corporation  
100 Clinton Ave., S.  
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Rochester, NY 14644

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| EXAMINER |
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SHOSHO, CALLIE E

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| ART UNIT | PAPER NUMBER |
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1714

DATE MAILED: 04/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/001,741

Applicant(s)

SMITH ET AL.

Examiner

Callie E. Shosho

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CD

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-13, 17, 22-24 and 26-33 is/are allowed.
- 6) ☒ Claim(s) 1-3, 14-16, 18-21 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. All outstanding rejections except for those described below are overcome by applicants' amendment filed 1/15/04.

It is noted that the new grounds of rejection as set forth in paragraph 3 below are necessitated by amendment.

**Claim Rejections - 35 USC § 112**

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The scope of newly added claim 25 is confusing because it appears to be identical to claim 16. What is the difference between the two claims? Clarification is requested.

**Claim Rejections - 35 USC § 103**

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-3, 14-16, 18-21, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marritt (U.S. 6,231,655) or Nyssen et al. (U.S. 6,245,138) either of which in view of Maycock et al. (U.S. 4,859,759) and Pearlstine et al. (U.S. 6,087,416).

The rejection is adequately set forth in paragraph 5 of the office action mailed 10/15/03 and is incorporated here by reference.

6. Claims 1, 14-16, 18-21, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marritt (U.S. 6,231,655) or Nyssen et al. (U.S. 6,245,138) either of which in view of Meuwly et al. (U.S. 5,837,792) and Pearlstine et al. (U.S. 6,087,416).

The rejection is adequately set forth in paragraph 6 of the office action mailed 10/15/03 and is incorporated here by reference.

#### **Response to Arguments**

7. Applicants' arguments filed 1/15/04 have been fully considered but they are not persuasive.

Specifically, applicants argue that:

- (a) there is no disclosure in either Marritt or Nyssen et al. of specific lightfastness agent.
- (b) Maycock et al. disclose siloxane which contains both benzotriazolyl compound and tetralkylpiperidyl compound.
- (c) No motivation to combine Pearlstine et al. with either Marritt or Nyssen et al. taken in combination with either Maycock et al. or Meuwly et al.

With respect to argument (a), it is agreed that there is no disclosure of specific lightfastness agents in either Marritt or Nyssen et al. which is why each reference is used in combination with Pearlstine et al. and either Maycock et al. or Meuwly et al. which teach lightfastness agent as presently claimed.

With respect to argument (b), it is agreed that Maycock et al. disclose siloxane which contains both benzotriazolyl compound and tetralkylpiperidyl compound, however, it is noted that there is nothing in the scope of the present claims which excludes the use of benzotriazolyl with attached tetralkylpiperidyl.

With respect to argument (c), it is noted that while both Maycock et al. and Meuwly et al. disclose lightfastness agents which are siloxanes that contain benzotriazolyl group, neither reference discloses that the siloxane contains hydrophilic moiety as presently claimed. This is why each reference was used in combination with Pearlstine et al. which teaches attaching hydrophilic group such as polyalkylene oxide to polysiloxane.

Applicants argue that there is no motivation to combine Pearlstine et al. with Marritt et al. and either Maycock et al. or Meuwly et al. or with Nyssen et al. and either Maycock et al. or Meuwly et al. given that in Pearlstine et al. the waterfastness and lightfastness are achieved by selecting certain colorants and the silicon surfactant is used to wet the surface of the substrate not for lightfastness.

However, it is noted that Pearlstine et al. is not used for its teaching of lightfastness agents. Pearlstine et al. is only used to teach modifying polysiloxanes with polyalkylene oxide

groups in order to control the degree of compatibility which influences surface tension as well as to control the degree of polarity. Given that Maycock et al. and Meuwly et al. disclose the use of polysiloxanes similar to those in Pearlstine et al. and given that Pearlstine et al. disclose that it is known to modify polysiloxanes with hydrophilic groups, it is the examiner's position that there is good motivation to combine the cited references.

**Allowable Subject Matter**

8. Claims 4-13, 17, 22-24, and 26-33 are allowable over the "closest" prior art Marritt (U.S. 6,231,655), Nyssen et al. (U.S. 6,245,138), Maycock et al. (U.S. 4,859,759), Meuwly et al. (U.S. 5,837,792), and Pearlstine et al. (U.S. 6,087,416) given that there is no disclosure or suggestion in any of the cited prior art of lightfastness agent of presently claimed formula II, III, IV, or V as required in claims 5-13, 17, 23-24, and 26-29 and further given that there is no disclosure or suggestion in the cited prior art of specific lightfastness agent of formula I as required in claims 4 and 30-33.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period


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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
3/30/04